Determination of bioactive sexual ingredients from *panicum maximum* species and the efficacy of the extract

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Statement of the problem: Traditionally, male inhabitants of East African coastal regions with penile dysfunction, premature ejaculation, low libido prefer using *panicum maximum* (*mbayaya*) as ethnomedicine rather than the modern synthesized drugs. This motivates us to determine the bioactive sexual ingredients from the plant extract and its efficacy.

Methodology and theoretical considerations: Samples were collected from Upenja north regions of Zanzibar where it grows naturally. The bioactive ingredients from the plant sample were extracted using the standard procedures and the standard solvents for extraction techniques. The presences of bioactive substances were qualitatively determined with the help of Classical, Hyphenated Chromatographic and Spectroscopic instrumental techniques. The preliminary phytochemical analyses for the relevant phytochemical constituents were assayed qualitatively using the standard methods to ascertain its medicinal values and safeness. The medicinal activity of this extract(considering the traditional dose response ratio) to be tested on rats by monitoring and measuring body temperature using cyrogen probe machine, evaluating number of mounts (no vaginal penetration), intromissions (vaginal penetration) and ejaculations.

Findings and recommendations: This study reveals the presence of major bioactive sexual ingredients thus ascertaining the ethnopharmacological use of the plant, however comparative analytical studies and evaluation of more ingredients from *panicum maximum* is recommended.

Keywords: *Panicum maximum*, intromissions, phytochemicals, ethnopharmacological, ethnomedicine

Biography

Ochieng O Anthony studied pure and applied chemistry, a PhD scholar and currently a Senior Chemistry lecturer at the faculty of science, Sumait University in Tanzania. He is also a co-author of determinations of acidic pharmaceutical components in analgesic drugs using wet analytical techniques and scientific journal chemical & material science reviewer. His current researches focuses on natural products and evaluating their medicinal values, pharmaceutics, cosmetology, Macroyclic compounds and their applications in drug targeting and Using statistical thermodynamics in evaluating physical constants. He is a member of Kenya Chemical Society, America Chemical Society, GNDU chemical society and Royal Chemical Society. He has over 18 years lecturing chemistry in higher academic institutions and seven years working in both technical & managerial positions in Cosmetic and Pharmaceutical companies.

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